

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027435**Date Inspected:** 10-Apr-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Salvador Merino**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Components**Summary of Items Observed:**

On this date, Quality Assurance Inspector (QAI) Kenneth Riley was present at the San Francisco Oakland bay Bridge job site at Yerba Buena Island to observe erection and welding activities for the San Francisco Oakland Bay Bridge (SFOBB) project. This Quality Assurance Inspector (QAI) observed the following work performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below:

Deck Access Holes (DAH)

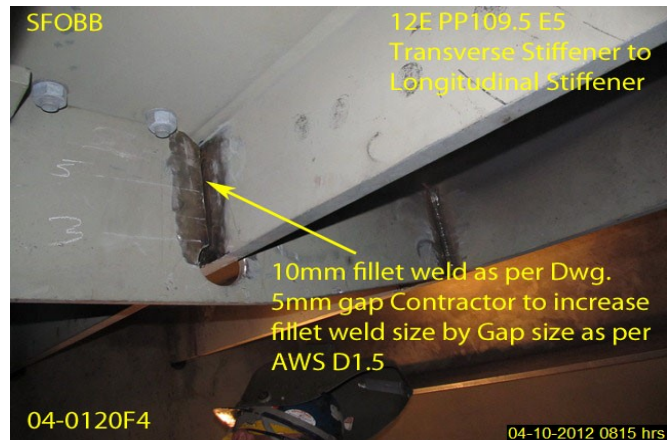
This QAI observed that the contractor had fit up the DAH at 12W PP109.5 W2. Salvador Sandoval was observed as placing the Shielded Metal Arc Welding (SMAW) root pass at this location. The electrode being used was a 3.0mm diameter E7018 for the Complete Joint Penetration (CJP) weld. The Welding Procedure Specification (WPS) used was ABF-WPS-D15-1040C with a measured welding amp of 128 F. The pre-heat for this location was measured at 65 degrees C (150 degrees F) using a weed burner which were verified using a tempstik and infrared gun by the QC. The welder was also observed by this QAI as using a chipping hammer, power grinder and power wire wheel for the interpass cleaning. Due to inclement weather the welder has to use diversion dams with silicone that diverts the water away from the welded areas. The area is covered with a wooden hut that is covered with a plastic covering for the rain. The QC inspector for this location was Salvador Merino and was observed verifying and documenting the welding parameters for this location, along with overseeing the welding operations. At the time of the observations no issues were noted by the QAI.

This QAI observed that welder Khit Lounechaney was using the Shielded Metal Arc Welding (SMAW) process, with electrode E7018 for the fillet welds in the vertical (3F) position, with a 3.2mm electrode. The Welding Procedure Specification (WPS) used for this location was ABF-WPS-D15-F1200 with welding amps measured at

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126. The pre-heat for this location was measured at 100 degrees C (200 degrees F) using a weed burner which were verified using a tempstik and infrared gun by the QC. The welder was also observed by this QAI as using a chipping hammer, power grinder and power wire wheel for the interpass cleaning. The location of the welding was the transverse plate stiffeners at 12E PP109.5 TS-LS. The material is Gr 345 to 485 plates. The gap for the Transverse to longitudinal stiffener was measured by the QC inspector and was found to be 5mm. This is the maximum allowable root gap as per AWS D1.5 for a fillet weld. The QC inspector has stated that he will have the welder increase the 10mm fillet weld to 15mm which is allowable by the contract documents. The QC inspector for this location was Salvador Merino and was observed verifying and documenting the welding parameters for this location, along with overseeing the welding operations. At the time of the observations no issues were noted by the QAI.



Summary of Conversations:

Basic conservation, fundamental to completion of the tasks at hand, occurred between this QAI and ABF QC personnel.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Riley,Ken

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer
